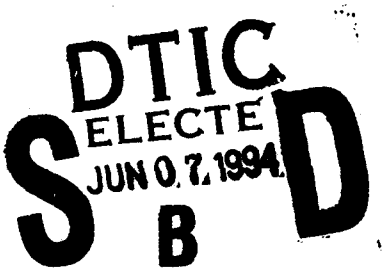
Fitness Reports of Naval Warfare Officers: A Search for Gender Differences



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The purpose of this investigation was to determine whether gender differences are evident in the narrative section of the fitness reports of naval warfare officers. An analysis conducted in 1983 had concluded that women and men officers are not evaluated without regard to gender.

The most recent regular fitness reports were obtained for matched samples of women and men surface warfare officers, naval aviators, and naval flight officers. Information was extracted from the narrative section of the reports and content analyzed. Significance tests were conducted of the frequency with which specific descriptors were used in the fitness reports of women and men.

The findings indicated that: (1) Significantly more comments appeared in women's fitness reports than in men's, contrary to the results of the 1983 analysis, due to raters describing personality traits of women more often than they did for men; (2) women warfare officers were not described with gender-typed words but were said to be dynamic, assertive, and energetic more frequently than were men; (3) leadership was the only area of performance in which women were rated significantly lower than men; (4) although, more women than men had the recommended-for-early-promotion box checked, more men were recommended for immediate promotion in the comments; and, (5) gender differences favoring women occurred more frequently in the fitness reports of surface warfare officers than in those of the aviation officers.

No evidence was found of sexist language in the fitness reports of women warfare officers, but the gender differences in the nature of recommendations and ratings of leadership could negatively affect the careers of women. Navy leaders should take steps to ensure that, when unwarranted, women officers are not rated as having less potential than their male peers.

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Foreword

In 1983, the Navy Personnel Research and Development Center investigated gender differences in Navy officer fitness reports. The study found significant differences that could have negatively affected the careers of women unrestricted line officers. As a result of the research findings, several efforts were undertaken to educate both raters and ratees about unintentional biasing of fitness reports. The present study was initiated to determine whether these efforts had been effective. The research was conducted under the sponsorship of the Chief of Naval Personnel (PERS-00W) as part of Work Request 92POPS595 (Reimbursable, O&M, N).

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Summary

Problem

Results of an analysis of officer fitness reports conducted in 1983 found significant gender differences. Recent attitude survey data suggest that women and men are not evaluated similarly.

Purpose

This investigation determined whether differences are evident in the narrative section of the fitness reports of women and men warfare officers.

Approach

The most recent regular fitness reports were obtained for matched samples of women and men surface warfare officers, naval aviators, and naval flight officers. Following the method developed for the 1983 Navy research, information was extracted from the narrative section of the reports and the content was analyzed. Significance tests were conducted of the frequency with which specific descriptors were used in the fitness reports of women and men.

Findings

1. Significantly more comments appeared in women's fitness reports than in men's, contrary to the results of the 1983 analysis. This finding resulted from raters describing personality traits of women more often than they did for men.

2. Women warfare officers were not described with gender-typed words, but were said to be dynamic, assertive, and energetic more frequently than were men.

3. Leadership was the only area of performance in which women were rated significantly lower than men.

4. The significant differences found for recommendations indicated that women are more often recommended for a follow-on assignment and men are more often recommended for promotion or for command.

5. More significant gender differences were found in the fitness reports of surface warfare officers than in those of the aviation officers.

Conclusions

No evidence was found of sexist language in the fitness reports of women warfare officers. However, the gender difference in the nature of recommendations suggests that women are not seen as having the same potential as their male peers.

Recommendations

The results of this research should be promulgated to correct the misperception that fitness reports are gender typed. The career histories of women warfare officers should be reviewed to ensure that they are receiving developmental assignments and leadership training equivalent to men.

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Introduction

Problem

Results from the 1989 and 1991 Navy Equal Opportunity/Sexual Harassment Survey suggest that women Navy officers feel that they are being discriminated against in their fitness reports (Rosenfeld, Culbertson, Booth-Kewley, & Magnusson, 1992; Rosenfeld, Culbertson, & Newell, in press). Research conducted a decade ago provides support for this perception (Thomas, Holmes & Carroll, 1983).

Purpose

This investigation assessed whether differences are evident in the narrative section of the fitness reports of women and men warfare officers.

Background

Since 1979, Navy women have been permitted to enter three warfare specialties: Surface Warfare Officer (SWO), Naval Aviator, and Naval Flight Officer (NFO). Despite the warfare designators, women officers in these specialties could not be permanently assigned to a ship or aviation squadron with a combat mission. Thus, their numbers were severely constrained. In December 1991, Congress voided the legal restriction on women officers in combat aircraft, but service policies preventing such assignments remained in effect until April 1993, when the Secretary of Defense directed the services to open all aviation assignments to women. Congress repealed the statutory restrictions on the assignment of Navy women in November 1993, paving the way for women to be integrated into all classes of ships.

Until very recently, men officers have been of greater value to the military than have women officers. Men, unlike women, could perform in all billets essential to military missions. Moreover, because men's assignments were not constrained by law, their careers were easier to manage than those of women with warfare specialties. For these reasons, senior officers may have consciously or unconsciously favored a male junior over a female junior. Such favoritism would have served the best interests of the military, though not necessarily the careers of women.

Having a career in the military depends heavily upon being promoted to the next higher rank within a specified period. Officers are recommended to the Secretary of the Navy for promotion by selection boards that are convened annually to review the records of eligible personnel. Because women warfare officers have not been permitted to fill the most career enhancing military billets (i.e., in combat ships and aircraft), they would be ranked below equally talented men if Navy policy did not influence the deliberations of selection boards by issuing precepts. For example, the precept for the lieutenant commander board that met in May 1993 stated:

> Due to both historic and existing statutory restrictions on the assignment of women in the Navy, the records of women officers before the board may show a career pattern different from that of their male counterparts. Such restrictions on duty assignments, which have foreclosed to women opportunities for operational and command assignments available to men, cannot be allowed to prejudice the selection of women for promotion. Accordingly, in determining a

> woman's qualification for promotion, duty performed by a women officer, whose assignability is constrained by law or policy, shall be given weight equal to duty performed by a male officer not so constrained which is equally well performed. In evaluating a woman officer, emphasis will be placed on her actual performance in assignments rather than her pattern of assignments as compared to men officers (Office of the Secretary of the Navy, 1993).

While Navy policy states that gender-based inequities in assignments should not penalize the careers of women officers, gender-based differences in fitness reports could still affect board deliberations. This possibility is of particular concern to women warfare officers, who only recently could be assigned to combat aircraft and combatant ships. Moreover, bias could enter the fitness reports of women officers since most senior officers in the warfare communities are men. More specifically, gender stereotyping, personal values, and men's ways of relating to women could influence the language in women's fitness reports.

Fitness reports are prepared semiannually for lieutenant junior grade and annually for all other officers except four-star admirals. There are also other circumstances under which they are submitted, such as when an officer detaches from a command or the commanding officer detaches. Although fitness reports are considered to be performance evaluations, their primary purpose is to indicate an officer's fitness for selection (e.g., to higher rank, for advanced training, and for command). The form itself is a single, two-sided page. The front side contains descriptive information about the officer and his/her quantitative ratings on nine performance factors and six personal traits, a promotion recommendation and ranking for early promotion (if applicable), judgments regarding trend of performance and desirability for specific assignments, and an overall evaluation. The back side is reserved for comments pertaining to leadership ability, traits not rated on the front side, unique skills, and anything else the reporting senior wishes to communicate regarding the career development of the ratee.

As with performance rating in industry, military evaluations suffer from inflation of the quantitative marks, rankings and ratings (Bjerke, Cleveland, Morrison, & Wilson, 1987; Haering, 1980; Kozlowski & Morrison, 1990; Larson & Rimland, 1984). Kozlowski and Morrison (1990) analyzed 15 fitness report dimensions for a sample of 603 lieutenant commanders. They reported that "there is no instance where more than 3% of the officers were rated less than in the top 1%" (p. 6). Because of the lack of variability in the quantitative ratings, selection boards rely on the narrative material in fitness reports to distinguish among officers. Thomas et al. (1983) pointed out that, "such material is vulnerable to the influence of personal biases or stereotypes, particularly when personality traits are being discussed. Moreover, there is no assurance that a well-written, unbiased evaluation will be interpreted without regard to gender" (p. 2).

Military Literature on Gender Differences in Performance Evaluation

Only a few studies of gender-related differences in performance evaluation have been conducted in military environments. In an early Army study (Mohr, 1976), newly commissioned officers rated their peers on leadership potential at the end of a 12-week basic course. Members of both sexes gave women lower ratings than men. Because women had scored lower than men on the Officer Evaluation Battery (OEB), Army tests of leadership and career potential, Mohr cautioned against interpreting the findings from the peer ratings as gender bias. However, she

noted that the OEB might be biased given that it had been validated on all-male samples and focused on leadership in combat.

Rice, Yoder, Adams, Priest, & Prince (1984) examined ratings of leadership ability of 1,096 men and 91 women in the Fourth Class (freshman) at the U.S. Military Academy. The ratings were performed by peers, senior cadets, a regular Army officer, and the cadet chain of command at three periods during the first year of training. Men were rated significantly higher than women during two of the periods. However, the authors warned that "these ratings may be contaminated and/or deficient, reflecting primarily the personal biases and implicit theories of the raters" (p. 896). The rationale for the caution was the substantial correlation between perceived leadership ability and both athletic ability and grades in the engineering curriculum. In other words, leadership was perceived to be in the masculine domain.

Thomas et al. (1983) performed a content analysis of fitness report narratives of women and men unrestricted line officers who were being considered for promotion to lieutenant commander. They found significant differences that favored men in terms of both the number and nature of the comments appearing in evaluations. Compared to the comments about women officers, the narratives for men were longer, contained more recommendations for future assignments, and had more descriptions detailing the impact of men's efforts on the Navy. Men also were significantly more apt to be described as qualified, logical, dynamic, mature, and aggressive than were women. On the other hand, women were cited proportionally more often than were men as supporting equal opportunity programs, being an asset to their commands, and looking impeccable in their uniforms. Thomas et al. created two genderless fitness report narratives, one using comments typically found in men's evaluations and the other using comments typically found in women's evaluations. However, no personal pronouns were used in the narratives. The mid-level men officers who experimentally reviewed these narratives overwhelmingly recommended the "male" officer for promotion.

A weakness of the Thomas et al. (1983) investigation was that the women and men whose fitness reports were analyzed were not matched on designator (job specialty). In the early 1980s, almost all women line officers were in the general unrestricted line (GenURL) community, whereas most of the men were in warfare communities. Thus, some of the gender-based differences could have been related to the types of jobs women and men were performing in the Navy.

Spishock and Scheifers (1983) added gender-identifying pronouns to the prototypical fitness report narratives created by Thomas et al. (1983). Four different protocols were created—male pronouns with comments from men's narratives, male pronouns with comments from women's narratives, female pronouns with comments from women's narratives, and female pronouns with comments from men's narratives. Using these four protocols, the researchers investigated whether knowledge of gender influenced the decision to promote. Their sample consisted of 35 unrestricted line officers in a graduate management class, all but one of whom were lieutenant or above. Regardless of the gender of the officer being rated, individuals with male-derived comments would have been selected whereas the officers described with the female-derived comments would have been passed over for promotion.

Davis and Guiterrez (1991) investigated the effect of rater's gender on comments in fitness reports. Their sample consisted of fitness reports that had been given to them by students at the Naval Postgraduate School and officers assigned to a submarine tender. Relative to their male counterparts, women raters made more recommendations regarding the ratee's future career and more often commented on the ratee's relationship with others. The authors interpreted these findings to be a reflection of the difference between GenURL raters (all of whom were women) and raters from other officer communities. Recommendations for specific assignments are particularly important to GenURL officers because their careers are less structured than the careers of warfare officers. In addition, the authors suggested that GenURL positions probably require more emphasis on interpersonal relationships than may be needed in the warfare specialties.

Civilian Literature on Gender Differences in Performance Evaluation

Nieva and Gutek (1981) reviewed 24 articles in the civilian research literature that investigated the effect of gender on performance evaluation. Four of these articles reported no difference, 4 showed pro-female bias, and 16 showed pro-male bias. A review of the post-1981 literature revealed that pro-male findings are still common. Several of the recent studies have focused on identifying variables that differentially affect the evaluations of women and men. Researchers have found that pro-male findings are more likely when the rater is male (Die, Debbs, & Walker, 1990; Paludi & Strayer, 1985), when raters hold traditional views about women's role (Dobbins, Cardy, & Truxillo, 1988), when a work group has a low representation of women, (Sackett, DuBois & Noe, 1991), and when the rater and ratee are dissimilar (Tsui & O'Reilly, 1989). All of these variables could negatively bias the evaluations of women officers, particularly those with warfare designators.

Approach

Sample

The research design required matched samples of women and men. The matching factors were designator, rank, and command. Since the number of women warfare officers defined the population of interest, sample selection began with the identification of all women SWOs, naval aviators, and NFOs. Students were eliminated from consideration because the Navy does not require comments on the performance of officers while they are in a school. Another consideration in sample selection was the overall number of officers. Analysis of fitness report narratives is very labor intensive. Thus, the decision was made to randomly reduce the number of SWOs to 120 nonstudents.[1] A sample of men who were matched to the women on command, rank, and designator was selected. Because some of the files that had been requested were not received and some of the fitness reports could not be used, the final samples consisted of 240 officers of each gender (see Table 1).

[1] Aviators and NFOs who were not students numbered less than 120 each.

Table 1

Distribution of Paired Women and Men Officers by Rank and Designator

Rank	SWO	Naval Aviator	NFO	Total
O-1	13	0	0	13
O-2	31	13	6	50
O-3	33	64	26	123
O-4	26	10	9	45
O-5	5	4	0	9
Total	108	91	41	240

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer.

Procedure

Content Analysis

The research focused on Section 88 of the most recent regular fitness report of the members of the sample. Units of information were identified and coded using the rules developed by Thomas et al. (1983) to permit comparisons with prior Navy research. The major rules regarding identification of units are as follows:

1. Information describing how work is performed is a unit to be coded, but descriptions of the work itself are not coded.

2. When a statement contains more than one descriptor (unit), whether a single word, phrase, or sentence, all units shall be coded.

3. Descriptors that are repeated are counted only once.

Thomas et al. had identified nine categories of information in fitness report narratives: manner of performance (called general performance in this report), personality traits, relations with others, self-expression, performance in combat, recommendations for promotion or future assignments, unique variables of concern to the Navy, leadership and management/administration skills, and impact of efforts on the Navy or the command. Analysis of practice fitness reports revealed that these categories were still relevant. The dictionary of descriptors that had been developed in 1983 needed additional key words and synonyms added to account for words in Section 88 that had not been encountered in the earlier analysis.

The consistency of data extraction and cataloging was further enhanced by having two coders practice analyzing fitness reports that were not to be used in the study. After the coders independently content analyzed each group of 10 extra evaluations, their consistency in both recognizing and categorizing descriptors was checked until an acceptable standard of inter-rater reliability was achieved. Guetzkow's (1950) formula for determining consistency in identifying a unit and Scott's (1955) index of inter-coder agreement were used to determine consistency. The standard for the former statistic was less than .01 and for the latter test was .85.

Statistical Analysis

The number of times each descriptor was used in the fitness reports of women and men was determined for each of the three officer designators. The *z*-test for the difference between frequencies was applied to the sums to determine whether certain words were used more often with one gender than the other. In addition, the mean number of descriptors within each category was tested for gender differences using the *t*-test. The alpha level used for determining the significance of both of these tests was .05. The overall numerical evaluation (Section 51) and the ranking for early promotion (Section 65) also were reviewed for gender differences within each designator.

Results

After the descriptor frequencies had been computed, the results from the fitness reports of naval aviators and NFOs were examined to determine whether these officers could be combined in the remaining analyses. Because these samples were relatively small (91 and 41, respectively), having a single aviation sample was deemed desirable. However, the comparison indicated that these designators should be treated as separate groups. Of the 94 unique descriptors tested, 22% ($N = 21$) yielded significantly different frequencies for naval aviators and NFOs. Therefore, analyses were conducted for three separate officer groups.

Ratings and Rankings

Block 51 of the fitness report contains the commanding officer's overall evaluation of the officer's performance. Scores may range from 1 (for the highest rating) to 9. Table 2 presents the frequencies of each score and the means for women and men in each of the designators studied. Consistent with the findings of Kozlowski and Morrison (1990), virtually all (98%) of the officers received the highest possible overall rating. Because of the lack of variability, a gender difference was not tested.

Table 2

Number of Women and Men Officers Who Received Each Level of Overall Rating

Overall Rating	SWO		Naval Aviator		NFO	
	Women	Men	Women	Men	Women	Men
1	104	105	90	89	41	41
2	3		1	2		
3	1	2				
8		1				
Mean	1.05	1.10	1.01	1.02	1.00	1.00

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer.

Another indicator of the overall level of performance is the recommendation (early, regular, or not recommended) and ranking for promotion, which are indicated in blocks on the front of fitness reports. A total of 57 women and 50 men were recommended for early promotion, a significant difference ($z = 2.66, p < .01$). Twenty seven of the women and 18 of the men were ranked "one of one," meaning that no other officer of the same status had been recommended. The remaining officers were compared to peers who were also recommended for early promotion. Table 3, which is based on data aggregated across designators because of small subsamples, shows that more of the men than women were ranked at the top and at the bottom of their group.

Table 3

Ranking by Reporting Senior of Officers Recommended for Early Promotion (Percentage in Each of Five Positions)

	Percentage	
Ranking Position	Women	Men
#1 Person	33	47
In Upper Half (but not #1)	10	3
At Midpoint	7	3
In Lower Half (but not last)	37	16
Last Person	13	31

Comments Section

Number of Descriptors

In the 1983 study, Thomas et al. reported that significantly more comments were made about the performance of men than women. Table 4 shows that in this analysis more comments were found in the fitness reports of women than of men. There were 5,279 descriptors appearing in the fitness reports of women and 5,035 in the fitness reports of men. Forty-seven percent of the comments made about SWOs showed significant gender differences, as compared to 31% for naval aviators and 29% for NFOs. Thus, there appeared to have been more similarity between the performance of women and men in the aviation community than in the surface community.

The number of comments made about women and men within categories of behavior was also compared. Only one category yielded a significant gender difference—personality traits. When individual descriptors were tested, however, 60% of the significant differences that were found favored women.

Table 4

Number of Descriptors in Fitness Reports

Category	Number of Descriptors in Category	Number of Descriptors Written			Number of Significant Differences Favoring[a]	
		Women	Men	*t*-ratio	Women	Men
General Performance	13	1,071	1,082	0.32	6	9
Personality Traits	26	1,538	1,369	3.06**	28	8
Relations With Others	13	313	305	0.28	5	5
Self-Expression	3	79	57	1.86	2	0
Combat Performance	1	10	20	1.88	0	2
Leadership/Management/Administration	5	342	357	0.71	2	5
Navy Variables	12	366	342	0.83	6	1
Positive Impact on Navy/Command	12	495	486	0.28	6	5
Recommendations	12	1,065	1,017	1.54	8	6
Total	98	5,279	5,035	2.22*	63	41

[a]The number of potential differences is three times the number of descriptors.
*$p < .05$.
**$p < .01$.

General Performance

The dictionary contains 13 descriptors of the manner in which the ratee performed on the job. Table 5 shows that nine of the significant differences that were found in this category favored men and six favored women. Women SWOs were more often described as exercising sound judgment, professional, praiseworthy, and a valuable asset than were men. Men SWOs, more frequently than women, were said to accomplish goals, be effective/productive, show satisfactory growth, and be capable. Fewer gender differences were found for naval aviators and NFOs. Three descriptors (exercises sound judgment, capable, and valuable asset) of aviation officers revealed gender differences that were the opposite of those found for SWOs.

Personality Traits

Of the 36 significant *z*-ratios shown in Table 6, 28 represented descriptors used more frequently in women's fitness reports than men's. Consistency across warfare specialties was found for nine traits. Women were more often described as flexible, motivated/dedicated, dependable/ responsible, perceptive, dynamic, energetic, assertive/decisive, and aggressive than men.

Relations With Others

The category of comments on interpersonal relationships contains 13 descriptors. Since five of the significant differences favored women and five favored men, neither gender appears to be

Table 5

Percentages of Fitness Report Narratives Describing General Performance

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	z-ratio	% of Women	% of Men	z-ratio	% of Women	% of Men	z-ratio
Accomplishes Goals	57	64	-2.69**	62	60	ns	68	63	ns
Exercises Sound Judgment	36	25	3.56***	27	32	-2.02*	29	27	ns
Effective/Productive	24	31	-2.69**	25	22	ns	22	27	ns
Professional	46	38	3.05**	53	55	ns	56	54	ns
Completes Tasks Ahead of Time	3	6	ns	1	5	-2.02*	5	0	ns
Contributed Meaningfully	35	35	ns	19	21	ns	22	39	-2.77**
Showed Satisfactory Growth	9	18	-3.05**	11	11	ns	12	12	ns
Praiseworthy	55	50	2.25*	68	60	2.70**	51	56	ns
Capable	21	34	-3.88***	32	33	ns	22	[illegible]	2.03*
Valuable Asset	17	12	2.25*	13	20	-2.49*	7	[illegible]0	-2.30*
Outstanding	85	82	ns	98	96	ns	98	95	ns
Skillful	52	54	ns	63	65	ns	78	73	ns
Maintains Big Picture	3	4	ns	1	1	ns	5	0	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 6

Percentages of Fitness Report Narratives Describing Personality Traits

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio
Intelligent	29	41	-3.70***	40	37	ns	39	24	2.53*
Thorough	36	42	-2.50*	40	25	3.74***	39	37	ns
Organized/Sets Priorities	31	34	ns	25	18	2.70**	39	34	ns
Flexible	35	30	2.50*	33	34	ns	51	41	2.03*
Motivated/Dedicated	56	54	ns	74	67	2.49*	73	61	2.30*
Dependable/Responsible	38	28	3.51***	59	47	3.39***	51	32	2.97**
Displays Initiative	39	32	2.69**	43	42	ns	39	56	-2.77**
Perceptive	27	23	2.01*	24	20	2.02*	24	10	2.53*
Prompt	9	5	2.25*	4	7	ns	15	7	ns
Logical/Displays Common Sense	14	8	2.50*	9	14	-2.26*	17	10	ns
Honest	19	24	-2.50*	27	25	ns	29	22	ns
Dynamic	16	12	2.01*	21	10	3.39***	12	7	ns
Energetic	44	40	2.01*	51	46	2.02*	51	37	2.53*
Assertive/Decisive	25	20	2.25*	23	19	2.02*	22	29	ns
Mature/Stable	13	16	ns	25	22	ns	7	17	-2.03*
Creative	19	8	3.56***	24	24	ns	27	24	ns
Aggressive	32	22	3.51***	41	38	ns	41	27	2.53*
Ambitious	51	38	3.88***	45	32	3.58***	39	54	-2.53*
Persistent	7	8	ns	6	6	ns	2	12	-2.03*
Sociable/Good Natured	9	11	ns	10	10	ns	10	12	ns
Confident	26	23	ns	31	32	ns	39	34	ns
Positive/Optimistic	13	10	ns	13	11	ns	20	12	ns
Tactful	6	4	ns	2	3	ns	2	7	ns
Vigilant	0	3	ns	0	0	ns	0	0	ns
Courageous	3	1	ns	1	1	ns	2	2	ns
Curious	0	2	ns	0	0	ns	0	0	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.

*$p < .05$.

**$p < .01$.

***$p < .001$.

viewed as superior to the other in regard to these behaviors (see Table 7). Contrary to research on gender stereotypes (Eagly & Steffen, 1984), men SWOs were more often seen as being attentive to the needs of others than were women. The fitness reports of men officers in all three communities contained more comments on their team playing behavior than did those of women officers. Women more frequently than men were described as being instructive (SWO), displaying good counseling skills (NFO), motivating others (naval aviator), getting along well with others (SWO), and as a role model (SWO).

Table 7

Percentages of Fitness Report Narratives Describing Relations With Others

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio
Instructive	13	8	2.25*	14	15	ns	12	12	ns
Attentive to Need of Others	10	21	-3.46***	18	20	ns	15	12	ns
Displays Good Counselling Skills	1	1	ns	7	7	ns	10	0	2.03*
Displays Team Building Skills	24	21	ns	13	18	-2.02*	17	17	ns
Motivates	15	13	ns	20	13	2.49*	7	12	ns
Team Player	10	13	-2.01*	13	20	-2.49*	10	20	-2.03*
Gets Along Well With Others	8	5	2.01*	2	3	ns	7	0	ns
Role Model	18	9	3.05**	19	19	ns	24	17	ns
Unbiased/Fair	6	6	ns	2	1	ns	10	5	ns
Assists Others	12	13	ns	8	5	ns	10	7	ns
Demanding	13	12	ns	3	5	ns	7	0	ns
Developmental	5	7	ns	4	8	ns	5	5	ns
Projects Authority	0	0	ns	2	0	ns	0	0	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.
**$p < .01$.
***$p < .001$.

Self-Expression

The self-expression category consists of three descriptors: written expression, oral expression, and command of the English language. Two significant gender differences were found (see Table 8). The fitness reports of women naval aviators contained more comments about their oral skills than did those of men naval aviators, and women NFOs had more comments about their command of language than did men.

Table 8

Percentages of Fitness Report Narratives Describing Self-Expression

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio
Oral	17	17	ns	23	9	3.74**	15	12	ns
Command of Language	6	6	ns	5	5	ns	12	2	2.03*
Written	5	6	ns	10	8	ns	10	2	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.
**$p < .001$.

Combat Performance

The combat category has only one descriptor, indicating that the ratee would perform capably in a combat situation. As shown in Table 9, this potential was commented on more frequently in the fitness reports of men SWOs and NFOs than in the evaluations of their female peers. There was no difference found for naval aviators, suggesting that these aviators are seen as equally capable of performing well in a combat situation.

Table 9

Percentages of Fitness Report Narratives Describing Combat

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio
Would Perform Capably	2	6	-2.25*	4	4	ns	10	22	-2.30*

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.

Qualities of Leadership and Management/Administration

Four of the five descriptors in the category of leadership and management/administration revealed significant gender differences. The men being evaluated were clearly believed to be more outstanding leaders than were women in all three warfare specialties, as shown in Table 10. Although women SWOs were more often than men SWOs described as being capable leaders or managers/administrators, these phrases connote weak praise in officer evaluations. Among NFOs, men officers were more apt to be described as capable managers/administrators than women officers.

Table 10

Percentages of Fitness Report Narratives Describing Qualities of Leadership/Management/Administration

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	z-ratio	% of Women	% of Men	z-ratio	% of Women	% of Men	z-ratio
Capable Leader	62	43	4.81***	52	54	ns	51	51	ns
Outstanding Leader	27	32	-2.50*	26	47	-4.61***	32	44	-2.30*
Inspirational Leader	1	5	-2.01*	4	4	ns	5	7	ns
Capable Manager/Administrator	56	48	3.08**	48	48	ns	44	56	-2.30*
Leads by Example	4	5	ns	6	7	ns	4	7	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.
**$p < .01$.
***$p < .001$.

Navy Variables

The Navy emphasizes and values certain characteristics that usually are not discussed in civilian performance evaluations. Twelve of these descriptors had been combined under the rubric Navy Variables and are presented in Table 11. Only five of these descriptors yielded significant gender differences. Somewhat surprising findings were that women, more so than men, were said to keep physically fit (naval aviator) and display military bearing (SWO). The fitness reports of women SWOs and naval aviators also mentioned significantly more often their pursuit of advanced education than did those of their male peers. As was found earlier (Thomas et al., 1983), support for equal opportunity was also more frequently commented upon in women's evaluations than in men's (SWO and naval aviator). The only Navy variable in this study that was observed more often in men than in women was being safety conscious (naval aviator).

Impact of the Officer's Performance

Many of the fitness reports discussed how the ratee had positively affected an aspect of the command, unit, or Navy. Twelve descriptors make up this category. Table 12 shows that six of the significant gender differences resulted from more comments in women's fitness reports and five from more comments in men's. The fitness reports of women, more so than men, mentioned the impact that they had had on special programs (naval aviator), material facilities (NFO), systems (SWO), and performance of others (naval aviator). The fitness reports of men naval aviators, more so than women naval aviators, mentioned the impact of their efforts on availability, inspection conditions, and safety. Comments about the effect of the officer's behavior on the performance of the wing, ship or command yielded opposing significant differences. Among SWOs, women had more comments than men; among NFOs the gender difference was reversed. Mixed results were also obtained for comments concerning the officer's impact on training.

Table 11

Percentages of Fitness Report Narratives Describing Other Important Navy Variables

Descriptor	SWO			Naval Aviator			NFO		
	% of Women	% of Men	z-ratio	% of Women	% of Men	z-ratio	% of Women	% of Men	z-ratio
Keeps Physically Fit	31	31	ns	64	56	2.70**	56	49	ns
Safety Conscious	2	2	ns	2	7	-2.02*	0	7	ns
Supports Equal Opportunity	11	6	2.50*	18	13	2.02*	12	12	ns
Displays Military Bearing	14	7	2.69**	29	27	ns	20	17	ns
Pursues Advanced Education	11	6	2.50*	9	3	2.26*	15	15	ns
Possess Navy Characteristics	5	3	ns	5	4	ns	2	0	ns
Follows Rules/Supports Policies	4	4	ns	7	4	ns	10	10	ns
Well-Groomed	4	6	ns	32	31	ns	17	22	ns
Active in Community	10	7	ns	13	12	ns	10	4	ns
Active in Navy Social Events/ Functions	2	4	ns	8	11	ns	7	0	ns
Enhances Camaraderie	0	2	ns	0	1	ns	2	2	ns
Enhances National or International Relations	2	4	ns	1	2	ns	0	2	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.
**$p < .01$.

Table 12

Percentages of Fitness Report Narratives Describing the Positive Impact of the Officer on the Navy

	SWO			Naval Aviator			NFO		
Descriptor	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio	% of Women	% of Men	*z*-ratio
On Availability	20	19	ns	20	24	-2.02*	20	12	ns
On Performance of Wing, Ship, & Command	41	34	2.69**	30	33	ns	20	34	-2.53*
On Savings of Time & Money	17	14	ns	15	14	ns	15	15	ns
On Special Programs	17	19	ns	24	20	2.02*	20	27	ns
On Material Facilities, Equipment, Development, & Maintenance	26	24	ns	14	12	ns	20	7	ns
On Inspection Conditions	35	38	ns	26	31	-2.02*	17	20	ns
On Safety	12	11	ns	29	33	-2.02*	7	10	ns
On Systems	6	3	2.01*	3	0	ns	5	7	ns
On Training	26	32	-2.69**	26	29	ns	29	20	2.03*
On Performance of Others	11	10	ns	15	10	2.26*	5	10	ns
On Retention	7	5	ns	7	3	ns	5	7	ns
On Recruiting	0	2	ns	1	0	ns	5	0	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.
**$p < .001$.

Recommendations

The number and nature of recommendations in fitness reports are critical components of the evaluation. Haering (1980), in an article in the *U.S. Naval Institute Proceedings*, clearly communicated their importance when he stated:

> The final paragraph (of the Fitness Report) summarizes your recommendations on the officer and what you believe to be his ultimate potential. Promotion potential, command capacity, and future duty recommendations are obligatory unless, as stated previously, you desire a weak or harmful report (p. 37).

The total number of recommendations in the fitness reports of naval aviators and NFOs showed no gender difference. Women SWOs, however, received a total of 470 recommendations as compared to 429 for men SWOs ($z = 6.48, p < .001$).

There are 12 descriptors in the recommendations category. Significant gender differences were found in the nature of the recommendations for all officer groups. Table 13 shows that across all designators, women were more likely than men to be recommended for specific follow-on assignments.[2] Women also were more likely than men to be recommended for post-graduate education. Men SWOs and NFOs had significantly more recommendations for immediate promotion than did their female counterparts. These results are not consistent with the finding that significantly more of the fitness reports of women than men had the recommended-for-early-promotion box checked on the front side of the form. The discrepancy is only among men. That is, 57 women had the box checked and 57 women (24%) were recommended for immediate promotion; 50 men had the box checked and 67 men (28%) were recommended for immediate promotion. Being recommended for early promotion on the front of the fitness report is probably more advantageous than being recommended for immediate promotion in the comments' section because selection boards are influenced by the number of fitness reports that have a check in the box.

To make a career of the Navy, an unrestricted line officer must be recommended for command and successfully screen for command. There was no difference in the number of women and men SWOs and naval aviators who were recommended for command. However, significantly more men NFOs than women NFOs received this critical endorsement.

Discussion

The universally outstanding ratings in the overall performance evaluation (section 51) of the officers in this study and in the research of others highlight an endemic problem with fitness reports. Not only are these numerical ratings of limited use to selection boards, but they also fail to provide developmental guidance for ratees. The awarding of high marks to officers at the top of an organization would be understandable, because of the winnowing process that occurs as personnel are promoted. But, the samples in this study ranged in rank from ensign to commander, and did not represent a "select" group of naval officers. Nevertheless, the performance of 98% of the officers in the samples was assigned the highest possible rating. For this reason, the two Navy investigations of possible gender differences in fitness reports have focused on narrative material.

Comparison of Results by Gender

Although 60% of the significant gender differences were described as favoring women, women's fitness reports were not necessarily better than those of men. Specific words in evaluations are fraught with meaning. The value of the word "outstanding," for example, is far greater than the worth of "capable." Additionally, it is important not to equate behaviors displayed during the rating period with intrinsic characteristics of individuals or a gender group. When the findings indicate that women were more frequently described as assertive than men, this result does not mean that women warfare officers are more assertive; instead, it means only that superiors more often mentioned the assertiveness of women officers in the narrative section of their fitness reports.

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[2]Two aviation officers were given the list of recommendations made for NFOs without reference to gender. They were asked to assign a rating on a scale of 1 (very career enhancing) to 5 (not particularly career enhancing) to each assignment. The mean rating for recommendations of women was 2.0; for men, it was 2.6.

Table 13

Percentages of Fitness Report Narratives Containing Recommendations

Descriptor	SWO % of Women	SWO % of Men	SWO z-ratio	Naval Aviator % of Women	Naval Aviator % of Men	Naval Aviator z-ratio	NFO % of Women	NFO % of Men	NFO z-ratio
General									
Shows Unlimited Potential	43	32	3.41***	27	36	-2.89***	41	39	ns
Shows Potential for Growth	6	3	ns	2	0	ns	2	2	ns
Recommended for Augmentation	6	4	ns	4	4	ns	0	0	ns
Assignment Related									
Recommended for Specific Assignment	24	18	2.69**	51	40	3.25**	51	15	4.28***
Recommended for Demanding Assignment	8	3	2.50*	9	8	ns	7	2	ns
Recommended for Joint Duty	15	1	4.01***	13	15	ns	10	10	ns
Post-Graduate Education	58	52	2.69**	55	57	ns	63	39	3.37***
Promotion Related									
Recommended for Command	23	24	ns	29	27	ns	24	46	-3.19**
Recommended for Immediate Promotion	25	29	-2.01*	22	23	ns	24	37	-2.30*
Ready for Next Rank	76	83	-2.88**	52	53	ns	71	85	-2.54*
Recommended for Promotion Ahead of Contemporaries	73	71	ns	86	87	ns	83	80	ns
Highly Recommended for Promotion	79	79	ns	91	93	ns	95	90	ns

Note. SWO = Surface Warfare Officer, NFO = Naval Flight Officer, ns = Not significant.
*$p < .05$.
**$p < .01$.
***$p < .001$.

Women's fitness reports had significantly more relevant comments than did men's. The source of the difference was one category of information—personality traits. If the frequencies for this category were eliminated, the gender difference in the total number of comments would no longer be significant.

The gender differences found for personality traits were inconsistent with stereotypes often reported in the research literature. Navy women warfare officers, more so than men, were described as dynamic, assertive, and energetic—traits that all fall within the competency cluster described by I. K. Broverman, Vogel, D. M. Broverman, Clarkson, and Rosenkrantz (1972) as being masculine. An explanation for these cross-sex personality characteristics may lie with the role requirements of warfare officers. That is, research performed during the last decade suggests

that gender stereotypes arise from the roles of women and men in our society (Eagly & Steffen, 1984). Because the women in this study were performing in a masculine role (i.e., warfare officer), they were seen as possessing traits consistent with that role. A provocative question that was not addressed in this study is, why were women more likely than men to be seen as displaying these traits?

The findings for leadership revealed that men were described as outstanding leaders more frequently than women in all three samples. Women as leaders in the warfare communities are a relatively recent phenomena. They have few female leaders to emulate and may be uncomfortable with the male model of leadership. As a result, the women may have adopted a leadership style that is best described as "capable." Conversely, the raters, most of whom were men, may be acknowledging that the women accomplished everything required of them but used different strategies and behaviors to achieve a goal. Thus, women's leadership methods would be seen as successful but less preferable than methods used by men. In the civilian performance appraisal literature (Latham & Wexley, 1981), this type of rating practice is known as similar-to-me error.

The descriptors addressing Navy-unique variables revealed that women officers in some warfare communities, more often than men, were said to keep physically fit and display a military bearing. Again, these behaviors are not typically associated with women. The women officers also were more likely than men to support equal opportunity and pursue advanced education, both of which are typical of their gender (Thomas et al., 1983). The most notable finding for descriptors in this category of performance, however, was that there were few significant differences.

On the front side of the fitness reports, significantly more women than men were recommended for early promotion but more women were ranked "one of one," diminishing the value of the recommendation. In the special language of fitness reports, being at the top of one's peers is indicative of greater potential than being "one of one." Additional support for this interpretation was found in the written comments where more men than women were recommended for immediate promotion and were said to be ready for the next rank. Also, among NFOs, men were recommended for command more often than women.

Comparisons of Results by Warfare Specialty

The comments in the fitness reports of SWOs yielded more significant gender differences than did those of naval aviators and NFOs, and the majority of these differences (31 of 46) favored women. Perhaps, this finding resulted from Navy assignment policy. That is, women have been restricted to noncombatant ships, a type of duty usually avoided by men on a fast career track. Commanding officers of these ships have commented to the senior author that the women officers in their crews are their best officers. A similar explanation may apply to the naval aviator community, where 18 of the 30 gender differences favored women. The most career enhancing positions for naval aviators are in combat aircraft—assignments held by none of the women or men in this study. Thus, with both the SWO and naval aviator samples, the top performing men may have opted for combatant platforms, whereas the full range of female talent was assigned to noncombatants. The results for NFOs achieved equity in that 50% of the significant gender differences favored each sex.

Comparison of Results to 1983 Navy Study

Thomas et al. (1983) found 16 significant gender differences in their analysis of comments in fitness reports. Almost all (13 of 16) of these differences favored men. The present analysis yielded 104 significant differences, 63 of which favored women. Because the samples of women and men were better matched in 1993 than had been possible in 1983, fewer rather than more gender differences had been anticipated.

The use of warfare officers in this research sample may have influenced the results due to the novelty of women performing well in a nontraditional area. Support for this explanation can be found in the research of Stern, Marrs, Millar, and Cole (1984), who reported that people best remember actions of others that are contrary to expectations. Thus, behaviors of men that fit the model of warfare officer (male) might be overlooked, whereas the behaviors of women achieve salience. P. A. Abramson, Goldberg, Greenberg, and L. M. Abramson (1977) also noted that, "When an individual achieves a level of success not anticipated, his/her achievement tends to be magnified rather than diminished. After all, it matters little what the platypus says, the wonder is that it can say anything at all" (p. 123). Thus, when a woman warfare officer performs well, raters may make more statements about her competency and traits than for an equally competent man warfare officer.

Another potential explanation for the differences found in women's fitness reports between 1983 and 1993 lies with the consciousness raising that has occurred. The Washington, D. C. chapter of the Women Officer's Professional Association was briefed on the results (Thomas, 1985) and uses them annually to educate its members on the need to influence the content of their fitness reports. In addition, an article about the major findings of the 1983 study was published in the *U.S. Naval Institute Proceedings* (Sadler, 1984). Thus, raters may have become more aware of language that could lead to gender bias and female ratees may be more involved in the evaluation process than a decade ago.

Conclusions

In the conclusions of their study of gender-based differences in fitness report narratives, Thomas et al. (1983) stated, "It appears that male evaluators think of women as cast from a traditional mold and have difficulty viewing them in active, competitive roles" (p. 14). Clearly, this is no longer the case. The reporting seniors for the women warfare officers in this sample viewed their female subordinates as equally dynamic, energetic, assertive, aggressive, and ambitious as their male peers, if not more so. Leadership is the only area where men were seen as more effective than women[3]. Whether this finding indicates that women are less effective leaders than men, that they have less opportunity to display their leadership abilities, or simply that women's leadership styles are different from those of men is an unanswered question.

No evidence was found of sexist language in the fitness reports of women warfare officers. The gender difference in the nature of recommendations, however, suggests that women are not seen as having the same potential as their male peers

[3]The gender difference in performance in combat is considered by the authors to be policy driven.

Recommendations

1. The results of this study should be promulgated to women warfare officers by means of briefings to the Women Officer's Professional Association and articles in newsletters. Some women officers still believe that sexism enters into their evaluations. This misperception should be corrected.

2. Because the gender difference in recommendations may not be based on actual differences in performance or potential, commanding officers need to be made aware of this disparity. The curriculum of the Prospective Commanding Officer/Prospective Executive Officer Course and at Officer Candidate School includes instruction on writing fitness reports. Students should be sensitized to the importance of using career-enhancing words to describe officers who are performing at or above the norm regardless of gender.

3. The career histories of women warfare officers should be reviewed to ensure that women and men receive equivalent developmental assignments and leadership training.

4. Research should be conducted on women's leadership style to examine its effectiveness and determine whether it differs from that of men.

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